

AMENDMENTS TO THE CLAIMS

1-34. (Cancelled)

35. (currently amended) A transgenic plant comprising a nucleic acid encoding a microbial β -1,4-endoglucanase (EC 3.2.1.4), wherein said nucleic acid is stably integrated into a nuclear or plastid genome of the plant and is under the control of a promoter active in a plant, wherein the promoter determines a spatial or temporal expression pattern for the microbial β -1,4-endoglucanase.

36. (previously presented) The transgenic plant of claim 35, wherein the promoter is a wound inducible or a chemically-inducible promoter.

37. (previously presented) The transgenic plant of claim 36, wherein the chemically-inducible promoter is selected from the group consisting of a PR-1, PR-1a, PR-2, PR-3, PR-4, and PR-5 promoter.

38. (previously presented) The transgenic plant of claim 35, wherein the microbial β -1,4-endoglucanase is from a *Thermomonospora* bacterium.

39. (previously presented) The transgenic plant of claim 38, wherein the microbial β -1,4-endoglucanase is thermostable.

40. (previously presented) The transgenic plant of claim 38, where in the microbial β -1,4-endoglucanase is from *T. fusca*.

41. (currently amended) A transgenic seed comprising a nucleic acid encoding a microbial β -1,4-endoglucanase (EC 3.2.1.4), wherein said nucleic acid is stably integrated into a nuclear or plastid genome of the plant and is under the control of a promoter active in a plant, wherein the promoter determines a spatial or temporal

expression pattern for the microbial β -1,4-endoglucanase obtained from the plant of claim 35.

42. (currently amended) A transgenic plant comprising a nucleic acid encoding a microbial β -1,4-endoglucanase (EC 3.2.1.4) and a ~~vacuole~~ targeting sequence, wherein the nucleic acid is stably integrated into a nuclear or plastid genome of the plant and is under control of a promoter active in a plant.

43. (currently amended) The transgenic plant of claim 42, wherein the promoter determines a spatial or temporal expression pattern for the microbial β -1,4-endoglucanase ~~is a wound inducible or a chemically inducible promoter.~~

44. (currently amended) The transgenic plant of claim 43, wherein the promoter is a wound inducible or chemically inducible promoter ~~the chemically inducible promoter is selected from the group consisting of a PR-1, PR-1a, PR-2, PR-3, PR-4, and PR-5 promoter.~~

45. (previously presented) The transgenic plant of claim 42, wherein the microbial β -1,4-endoglucanase is from a *Thermomonospora* bacterium.

46. (previously presented) The transgenic plant of claim 45, wherein the microbial β -1,4-endoglucanase is thermostable.

47. (previously presented) The transgenic plant of claim 45, where in the microbial β -1,4-endoglucanase is from *T. fusca*.

48. (currently amended) A transgenic seed comprising a nucleic acid encoding a microbial β -1,4-endoglucanase (EC 3.2.1.4) and a targeting sequence, wherein the nucleic acid is stably integrated into a nuclear or plastid genome of the plant and is under control of a promoter active in a plant ~~obtained from the plant of claim 42.~~

49. (new) The transgenic plant of claim 42, wherein the targeting sequence is a vacuole targeting sequence.

50. (new) The transgenic seed of claim 48, wherein the targeting sequence is a vacuole targeting sequence.